Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (Cancelled)

22. (Currently amended) A method for modulating G-protein mediated signal transduction comprising:

~~providing a cell having a disturbed G-protein mediated signal transduction and~~ disturbing or stimulating G protein mediated signal transduction in a cell having a receptor tyrosine kinase capable of activation by G-protein mediated signal transduction;

contacting the cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway resulting in an activation of the receptor tyrosine kinase and thereby modulating the receptor tyrosine kinase activation by G-protein-mediated signal transduction.

23. (Previously presented) The method according to claim 22, wherein said receptor tyrosine kinase is epidermal growth factor receptor (EGFR).

24. (Previously presented) The method according to claim 22, wherein said compound affecting an extracellular G protein or G protein coupled receptor initiated signal pathway affects (I) a proteinase cleaving a precursor of a ligand for the

receptor tyrosine kinase or (ii) a precursor of a ligand for the receptor tyrosine kinase.

25. (Previously presented) The method according to claim 24, wherein the compound affects the proteinase by directly stimulating or inhibiting proteinase activity.

26. (Previously presented)The method according to claim 24, wherein said precursor of a ligand is a membrane associated molecule.

27. (Previously presented) The method according to claim 26, wherein said precursor of a ligand for the receptor tyrosine kinase is proheparin-epidermal growth factor (proHB-EGF) and said receptor tyrosine kinase is EGFR.

28. (Previously presented)The method according to claim 24, wherein said proteinase is a membrane-associated proteinase.

29. (Previously presented) The method according to claim 24, wherein said proteinase is a metalloproteinase.

30. (Previously presented) The method according to claim 29, wherein said metalloproteinase is a zinc-dependent proteinase.

31. (Previously presented) The method according to claim 24, wherein said proteinase activity is inhibited by batimastat.

32. (Canceled)

33. (Previously presented) The method according to claim 22, wherein said receptor tyrosine kinase is selected from the group consisting of EGFR, HER-2, HER-3, HER-4, TNF receptor 1, TNF receptor 2, CD 30 AND IL-6 receptor.

34. (Previously presented) The method according to claim 22, wherein said receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family.

35. (Previously presented) A method for identifying compounds for modulating G-protein mediated signal transduction, comprising contacting a cell containing a receptor tyrosine kinase capable of activation by G-protein mediated signal transduction with a test compound suspected of being a modulator of a proteinase or a precursor of a ligand of the receptor tyrosine kinase, and evaluating G-protein mediated receptor tyrosine kinase activation upon exposure of the cell to said test compound.

36. (Currently amended) A method for modulating a G-protein mediated signal transduction, comprising:

~~providing a cell having a disturbed G-protein mediated signal transduction~~

~~and~~ disturbing or stimulating G protein mediated signal transduction in a cell having a receptor tyrosine kinase capable of activation by G-protein mediated signal transduction, wherein said receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family, said cell comprising an extracellular domain and having a G-protein mediated signal transduction pathway wherein one or more tyrosine residues are phosphorylated based on the activation of signal transduction pathway, the extracellular domain of said receptor is capable of binding to its receptor ligand, and said ligand is generated from a precursor of said ligand by a proteinase-dependent cleavage;

contacting said cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway resulting in the activation of the receptor tyrosine kinase and thereby modulating the receptor tyrosine kinase activation by G-protein mediated signal transduction.

37. (New) A method for modulating G-protein mediated signal transduction between two cells, comprising:

providing a first cell having a disturbed G-protein mediated signal transduction and a second cell having a receptor tyrosine kinase capable of activation by G protein mediated signal transduction; wherein the first cell is in contact with the second cell;

contacting the first cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway between said first and second cells resulting in an activation of the receptor tyrosine kinase on the second cell, thereby modulating receptor tyrosine kinase activation by G-protein-

mediated extracellular signal transfer.